



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION IX  
75 Hawthorne Street  
San Francisco, CA 94105

Via Electronic Mail

SEP 18 2014

Mr. Bart Koch  
Safety and Environmental Services Section Manager  
700 North Alameda St. Rm ES38-1113  
Los Angeles, CA 90012

**Re: Polychlorinated Biphenyls Cleanup under Toxic Substance Control Act – Request for TSCA Risk-Based Disposal Approval For the Removal of PCB-Containing Caulk Robert B. Diemer Treatment Plant, Basins 1 through 8, 3972 Valley View Avenue Yorba Linda, California.**

Dear Mr. Koch

Thank you for working with the U.S. Environmental Protection Agency, Region 9 (USEPA) to address the removal of PCB containing caulk at the Robert B. Diemer Water Treatment Plant (site) located at 3972 Valley View Avenue Yorba Linda, California. USEPA has received and reviewed Metropolitan Water Districts (MWD) December 2, 2013 and all subsequent revisions to the *Request for TSCA Risk-Based Disposal Approval For the Removal of PCB-Containing Caulk Robert B. Diemer Treatment Plant, Basins 1 through 8* (TRBDA) which outlines MWD remediation plan. USEPA is approving MWD's TRBDA with conditions under 40 CFR 761.61(c) (risk-based disposal approval). **Enclosure 1** contains USEPA's conditional approval. MWD shall implement the TRBDA as modified by those conditions. MWD will be removing and disposing of PCB containing caulk in conjunction with a multi-million dollar renovation project at the site. The cleanup approach is as follows:

1. MWD will implement a pilot study on basin 4 with the goal of achieving  $\leq 22$  mg/kg total PCBs at either  $\frac{1}{8}$  inch or  $\frac{1}{4}$  inch of concrete removal.
2. Meeting this goal will be determined by the data and/or use of the ProUCL at 95% confidence on basin 4 (if necessary).
3. If goals can be met then no encapsulation is required and either  $\frac{1}{8}$  or  $\frac{1}{4}$  concrete will be removed for the remaining 7 basins as indicated by the pilot study.
4. If goals **cannot** be met then total encapsulation, as proposed in MWD TRBDA will be required on all 8 basins.
5. The construction specifications require the application of an epoxy or concrete to fill in the spaces left by removing  $\frac{1}{8}$  to  $\frac{1}{4}$  inch concrete. This process is necessary to provide a smooth surface area and will be accomplished in all basins regardless of the chosen remediation method used.

6. Verification testing of water will be conducted before the first distribution to customers.

MWD TRBDA is modified by the USEPA conditions of approval and some of those conditions include:

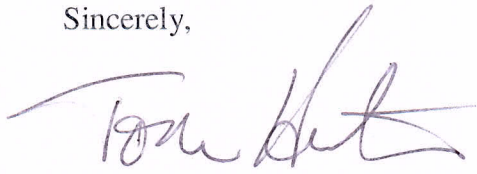
- 105 8 1 932
- Any soil, debris, and sediment created as a result of construction shall be disposed of as PCB remediation waste in accordance with 40 CFR 761.61(a)(5)
  - PCB-containing caulk will be disposed of as PCB bulk product in accordance with 40 CFR 761.62 and applicable state requirements.
  - USEPA is requiring a 95% confidence limit of the mean PCB concentration of samples using the ProUCL software.
  - MWD shall notify USEPA upon sale or deconstruction of the site in order to facilitate proper disposal of potential PCB remediation waste.

This Approval does not relieve the owner, Metropolitan Water District from complying with all other applicable federal, state, and local regulations and permits. Departure from the conditions of the Approval without prior written permission from USEPA may result in the commencement of proceedings to revoke this Approval, and/or an enforcement action. Nothing in this Approval bars USEPA from imposing penalties for violations of this approval or for violations of other applicable TSCA PCB requirements or for activities not covered under this Approval.

This approval only applies to the Metropolitan Water Districts Robert B. Diemer Treatment Plant located at 3972 Valley View Avenue Yorba Linda, California. USEPA reserves the right to require additional characterization and/or cleanup of PCBs at the site if new information during additional site characterization, cleanup verification, and/or during future post-cleanup activities (e.g., redevelopment and post redevelopment) at the property shows that PCBs remain at the site above the approved PCB cleanup level. In addition, USEPA may require cleanup in areas immediately adjacent to the site if those areas are found to be impacted by PCBs from the site.

USEPA appreciates the opportunity to assist Metropolitan Water District on the PCB cleanup to be conducted at their facility in Yorba Linda, California. If you have any questions regarding this Approval please contact George Randell at 415.972.3439. Thank you for your cooperation.

Sincerely,

  
for Jeff Scott, Director  
Waste Management Division

**Enclosure 1**

**Cc Via Electronic Mail Only**

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
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**USEPA Conditional Approval for Risk-Based PCB Cleanup  
under the Toxic Substances Control Act, 40 CFR 761.61(c)  
at the Robert B. Diemer Water Treatment Plant, Basins 1 through 8,  
3972 Valley View Avenue Yorba Linda, California.**

**A. Introduction**

The U.S. Environmental Protection Agency (USEPA) Region 9 received Metropolitan Water Districts (MWD) Request for *TSCA Risk-Based Disposal Approval For the Removal of PCB-Containing Caulk, Robert B. Diemer Treatment Plant, Basins 1 through 8* (TRBDA) dated December 2, 2013. The TRBDA provides information regarding existing PCB investigation and site characterization data, site usage, and potential remedial actions for the Robert B. Diemer Water Treatment Plant Located at 3972 Valley View Avenue Yorba Linda, California. After many meetings, phone conferences and discussions with MWD the TRBDA has been revised to address the USEPA's many concerns. The revisions are as follows:

- March 2, 2014 revised work plan addressing pilot study.
- June 18, 2014 provides information regarding epoxy and use of ProUCL for statistical analysis (Appendix A)
- June 26, 2014 changed the thickness specifications for epoxy to approximately 40mils (Appendix B).
- July 25, 2014 provides figures depicting sample locations for the pilot study and potential additional sample for the ProUCL statistical analysis (Appendix C). The revision also provided an updated basin return to service plan along with contingencies (Appendix D).

The USEPA hereby approves with conditions the cleanup actions described in **Section III CAULK AND CONCRETE REMOVAL OVERVIEW** of MWD *Request for TSCA Risk-Based Disposal Approval For The Removal of PCB-Containing Caulk, Robert B. Diemer Treatment Plant, Basins 1 through 8* dated March 1, 2014 and all revisions herein effective on the date of this enclosure. This Approval is issued under the Toxic Substances Control Act (TSCA) regulatory requirements for a risk-based cleanup of PCBs under 40 CFR 761.61(c). Section C of this document contains the conditions of approval.

**B. Site Background**

**1. Former Land Use and Possible Sources of PCB Contamination**

**Current Land Use**

The Robert B. Diemer Water Treatment Plant (Diemer) is one of five treatment Plants in the Metropolitan Water District. The Metropolitan Water District is a conglomerate of 26 cities and water districts that provides drinking water to approximately 18.4 million people in parts of Los Angeles, Orange, San Diego, Riverside, San Bernardino, and Ventura Counties. Diemer was placed into service in 1963 and is Located in Yorba Linda, California. Diemer delivers



approximately 520 million gallons of water a day. Water is supplied to Diemer from the Colorado River and the State Water Project (Delta Water). Diemer is the only plant connected to the Metropolitan Water Districts system that maintains a 5.1 megawatt hydroelectric plant that can be used to supplement its own energy use to minimize its draw on the cities power grid.

### **PCB Sources**

The MWD Robert B. Diemer Water Treatment Plant will be undergoing a major overhaul of all the equipment in its 8 basins. Testing at Diemer has found the caulk in expansion and construction joints in Basin 4 contain PCBs  $\geq 50$  mg/kg (ppm) with the highest concentration found at 146,000ppm total PCBs. MWD believes the caulk was manufactured with PCBs and assumes all 8 basins contain PCB-containing caulk.

### **C. USEPA Conditions of Approval and Additional Comments**

1. The USEPA is approving the disposal of bulk PCB remediation waste including but not limited to soil, sediment, and debris in accordance with 40 CFR 761.61(a)(5).
2. The USPEA is approving the disposal of PCB bulk product waste, namely PCB-Containing Caulk, as defined in 40 CFR 761.3 in accordance with 40 CFR 761.62
3. **Cleanup levels and Actions.** MWD is conducting a strategic cleanup plan, which includes a pilot study, the use of USEPAs ProUCL software, or two part epoxy encapsulation. The conditions of the Cleanup levels and actions are listed below.
  - a. MWD shall conduct their pilot study in accordance with their TRBDA with the exception that they will select the 10 highest PCB concentrations based on previous sample results provided in the TRBDA (Appendix C). MWD is proposing a cleanup level of  $\leq 22$  mg/kg (ppm) total PCBs based on a leach-ability study performed and previously approved by the USEPA at MWD Joseph Jensen Water Treatment Plant.
    - i. The USEPA accepts MWDs proposed cleanup level of  $\leq 22$  mg/kg (ppm) total PCB. Each verification sample must meet the cleanup level.
    - ii. If any sample verification sample exceeds the cleanup level of 22 mg/kg total PCBs MWD shall execute part 3(b) of this approval
  - b. MWD shall perform sampling and analysis using USEPAS ProUCL software as described in Section III part (h) **Statistical Analysis** as proposed in discussions and emails provided by John Clark dated June 18, 2014 (Appendix A).
    - i. The ProUCL software will be used to statistically analyze the data to determine if the upper **95-percent** confidence limit of the mean PCB concentration of the samples is less than the proposed cleanup level of 22 mg/kg total PCBs.
    - ii. If the mean concentration level exceeds the approved cleanup level of 22 mg/kg total PCBs MWD shall execute part 3(c) of this approval.

- c. MWD shall encapsulate in accordance with the TRBDA and appendix A
- 4. Disposal of PCBs.** MWD shall dispose of all waste that it generates during the PCB cleanup in accordance with the Toxic Substance Control Act (TSCA) PCB and other applicable federal, state, and local regulations. In determining the disposal method for the waste, MWD must comply with TSCA's anti-dilution requirements in 40 CFR 761.1(b).
- a. All bulk PCB remediation waste must be disposed of in accordance with the requirements in 40 CFR 761.61(a)(5).
  - b. All PCB bulk product waste (i.e. PCB containing caulk and concrete or debris that has caulking still attached) shall be disposed of in accordance with 40 CFR 761.62. MWD must select the appropriate facility based on in-situ PCB concentrations in the waste.
  - c. PCB cleanup waste (e.g. personal protective equipment, rags, gloves booties) shall be disposed of in accordance with 40 CFR 761.61(a)(5)(v).
- 5. Equipment Decontamination.** MWD must decontaminate non-disposable sampling tools and equipment, as well as movable equipment used during cleanup and/or additional sampling in accordance with 40 CFR 761.79(c)(2). Decontamination of sample equipment and tools must be conducted each time samples are collected to prevent cross-contamination. Decontamination residues must be disposed of at their original concentration in accordance with the requirements in 40 CFR 761.79(g). Recordkeeping of the decontamination events must be maintained in accordance with the requirements in 40 CFR 761.79(f)(2). These procedures must be implemented in a manner that is protective of human health and the environment consistent with the requirements in 40 CFR 761.79(e).
- 6. Contingency Plan.** The contingency plan shall be conducted in accordance with MWD TRBDA (appendix D).
- 7. PCB Clean Up Completion Report.** Within 60 days MWD completes the PCB Clean up at the Site, MWD must submit a PCB cleanup report for the USEPA approval under 40 CFR 761.61(c) that includes all relevant data and justifications demonstrating that MWD achieved the USEPA approved Cleanup levels at the Site. MWD must provide at a minimum all reporting requirements in 40 CFR 761.61 (a)(9) and 40 CFR 761.125(c)(5).
- 8. Sampling data presentation.** In the final cleanup completion report, MWD must include figures depicting the location and results for all Site characterization and cleanup verification. In addition, survey or GPS coordinates for cleanup verification samples must be recorded and presented in the data summaries to be included in the report.



- 9. The Sale or Decommissioning of Robert B. Diemer Treatment Plant.** The PCBs that will potentially be left in the concrete will likely be classified as PCB remediation waste; therefore, MWD shall notify USEPA upon sale, or deconstruction of the Robert B. Diemer Treatment Plant. MWD or the new owner shall dispose of PCB containing material in accordance with TSCA regulations.